

CLAIMS

What is claimed is:

1. A method of fabricating a heat exchanger assembly having a core with fins and tubes extending from opposite ends and into openings in tanks at each end of the core
5 and tank caps closing open ends of the tanks at the sides of the core, said method comprising the steps of;

forming reinforcement member integrally with a tank cap via a connection portion with reinforcing flanges extending upwardly from the edges of said reinforcement members and terminating short of said connection portion, and placing a tank cap over each
10 open end of the tank with the reinforcement members connected to the tank caps extending along the sides of the core and spaced from one another along the sides of the core whereby the core is devoid of reinforcement between the reinforcement members.
2. A method as set forth in claim 1 including fabricating the reinforcement
15 members, the tank cap and the tank components of metal and brazing the metal components together.
3. A method as set forth in claim 1 including forming the connection portion more narrow in width than the tank cap integral therewith.
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4. A method as set forth in claim 1 including forming notches in the connection portion.

5. A method as set forth in claim 1 including forming the integral connection portion with reverse bends.

6. A method as set forth in claim 1 including placing the reinforcement members
5 into direct engagement with the fins of the core.

7. A method as set forth in claim 1 including forming openings in the flanges of the reinforcing members.

10 8. A method as set forth in claim 7 including attaching an anchor to the flanges in the openings thereof.

9. A method as set forth in claim 1 further defined as forming the tank cap with a dished configuration having side walls extending in the opposite direction from said flanges
15 to a bottom for disposition in the open end of the tank with the side walls engaging the interior of the tank.

10. A heat exchanger assembly comprising;
a core with fins and tubes extending from opposite ends between opposite
20 sides thereof,
first and second tanks at said opposite ends of said core and in fluid tight communication with said tubes and extending between open ends,
a plurality of tank caps closing said open ends of said tanks,

a reinforcement member integrally connected to each of said tank caps by an integral connection portion. with the reinforcement members connected to said tank caps extending along the sides of the core and spaced from one another along the sides of the core whereby the core is devoid of reinforcement between the reinforcement members,

5 reinforcing flanges extending upwardly from the edges of said reinforcement members and terminating short of said connection portion.

11. An assembly as set forth in claim 10 wherein said connection portion is more narrow in width than said tank cap integral therewith.

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12. An assembly as set forth in claim 10 wherein said connection portion includes reverse bends.

13. An assembly as set forth in claim 10 wherein said reinforcing member and
15 said integral tank cap consist of one homogenous material.

14. An assembly as set forth in claim 13 wherein said homogenous material is metal.

20 15. An assembly as set forth in claim 10 wherein said reinforcing members, said tank caps, and said tubes consist of metal and are brazed together.

16. An assembly as set forth in claim 10 wherein said tank cap has a dished configuration with a bottom and sidewalls engaging the interior of the tank, and said flanges extend in the opposite direction to said dished configuration.

5 17. An assembly as set forth in claim 10 including notches in the connection portion.

18. An assembly as set forth in claim 10 including said reinforcement members being in direct engagement with said fins of said core.

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19. An assembly as set forth in claim 10 wherein said flanges of said reinforcing members define openings therein.

20. An assembly as set forth in claim 19 including an anchor attached to said
15 flanges in said openings therein.